

Date: Monday, 9/10/2007 1:28:16 PM  
User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : TUBE
Job Number : 34493	
Estimate Number : 12171	
P.O. Number :	Part Number : D34767
This Issue : 9/10/2007 S.O. No. :	Drawing Number : D3476 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SMALL /MED FAB	Drawing Revision : A
Previous Run : 34105	Material :
Written By : <u>                    </u>	Due Date : 10/10/2007 Qty: 4 Um: Each
Checked & Approved By : <u>                    </u>	
Comment : Est Rev:A New Issue 06-02-03 JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M304S26GA	304/316 0.018 SHEET
-----	-----------	---------------------



Comment: Qty.: 0.1072 sf(s)/Unit Total : 0.4288 sf(s)  
Pick:  
304/316 0.018 SHEET  
(M304S26GA)  
Batch: M105496

SAD 07/09/22

2.0	SHEAR	SHEAR
-----	-------	-------



Comment: SHEAR  
Cut Flat pattern as per Dwg D3476

SAD 07/09/22

3.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1

- 1-Deburr SAD 07/09/22 6
- 2-Roll as per Dwg D3476
- 3-Form Bead as per Dwg D3476 Using Rotary Machine.
- 4-Spot Weld as per Dwg D3476 and Dart QSI 018
- 5-Cut 69 Deg Angle as per Dwg D3476.

MF 07-10-30 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 9/10/2007 1:28:16 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE

Job Number: 34493

Part Number: D34767

Job Number:



Seq. #:

Machine Or Operation:

Description :

4.0

QC

VISUAL WELDING INSPECTION

07/10/30



Comment: VISUAL WELDING INSPECTION

SB 07/10/30

6

5.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SA 07/10/30

6

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: GA

mt 07-10-30

6

7.0

QC21

FINAL INSPECTION/W/O RELEASE



07.10.31

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



U 07-10-31

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

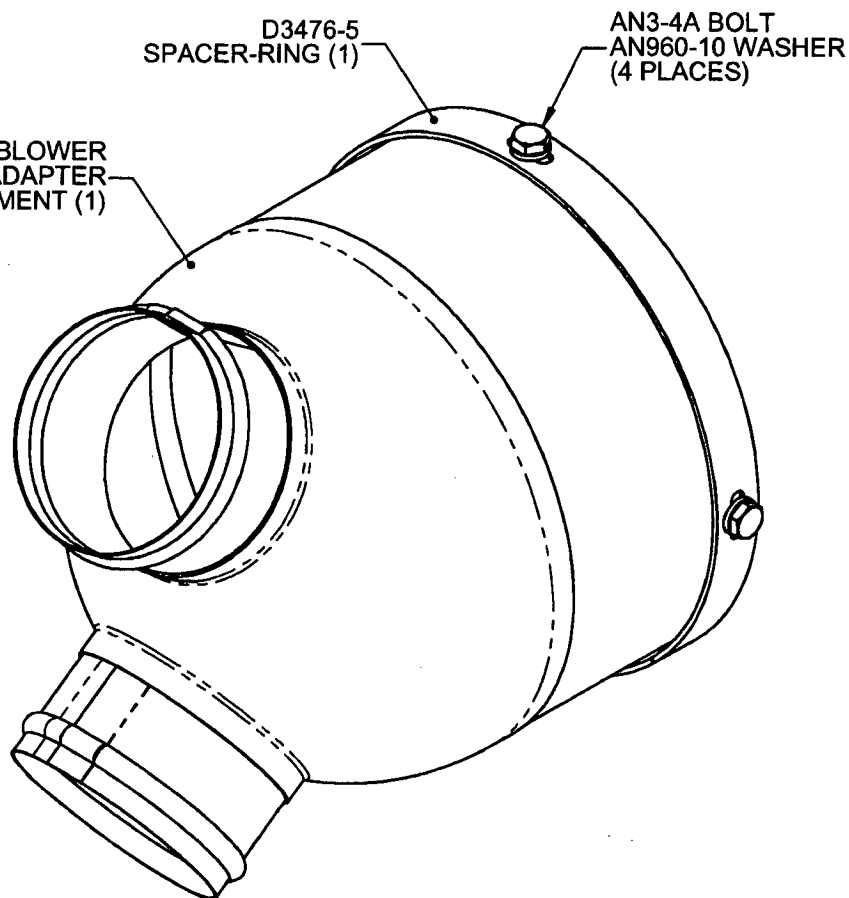


DESIGN <i>B</i>	DRAWN BY <i>B</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>A</i>	APPROVED <i>A</i>	DRAWING NO. <b>D3476</b>	REV. A SHEET 1 OF 7
DATE <b>06.01.27</b>		TITLE <b>BLOWER MOTOR ADAPTER</b>	SCALE 1:2
A	06.01.27	NEW ISSUE	

*06.04.03*

**UNDER REVIEW**

*02.09.02*  
*Dim + Manufacturing*  
*Changes*



### **D3476-041 BLOWER MOTOR ADAPTER**

- 1) IDENTIFY WITH DART P/N D3476-041 USING FINE POINT PERMANENT INK MARKER

QTY -041	P/N	DESCRIPTION
X	D3476-041	BLOWER MOTOR ADAPTER
1	D3476-043	BLOWER MOTOR ADAPTER WELDMENT
1	D3476-5	SPACER-RING
4	AN3-4A	BOLT
4	AN960-10	WASHER

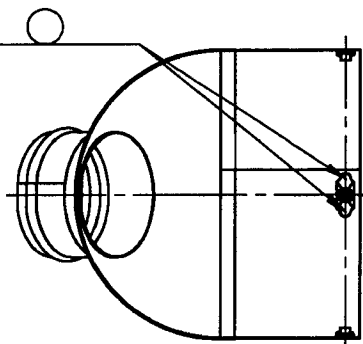
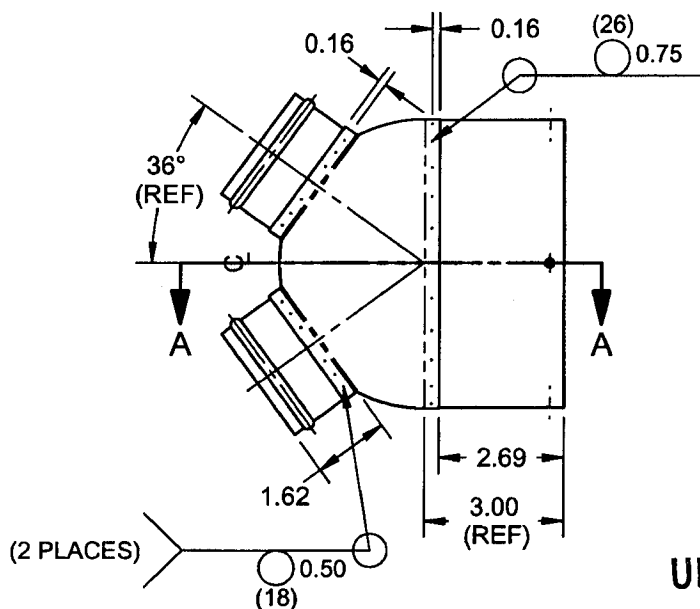
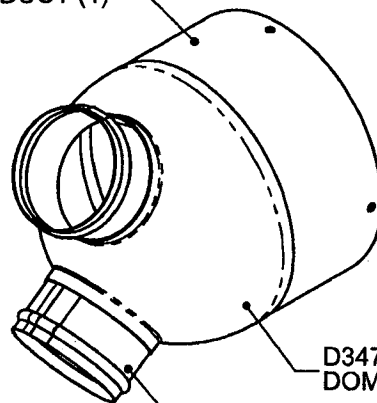
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CHECKED H	APPROVED H	DRAWING NO. <b>D3476</b>	REV. A SHEET 2 OF 7
DATE <b>06.01.27</b>		TITLE <b>BLOWER MOTOR ADAPTER</b>	SCALE 1:4

LOCATE AND  
SPOT WELD  
NUT PLATES  
(4 PLACES)**SECTION A-A**D3476-1  
DUCT (1)D3476-3  
DOME (1)D3476-7 TUBE  
(2 PLACES)NAS-1031C3W  
NUT PLATES  
(4 PLACES)OFFSET SEAM  
ON DUCT

15°

**UNDER REVIEW**C2.09.03  
DIP + MANUFACTURING  
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WORK ORDER**D3476-043 BLOWER MOTOR  
ADAPTER WELDMENT****NOTES:**

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) PART IS SYMMETRICAL ABOUT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

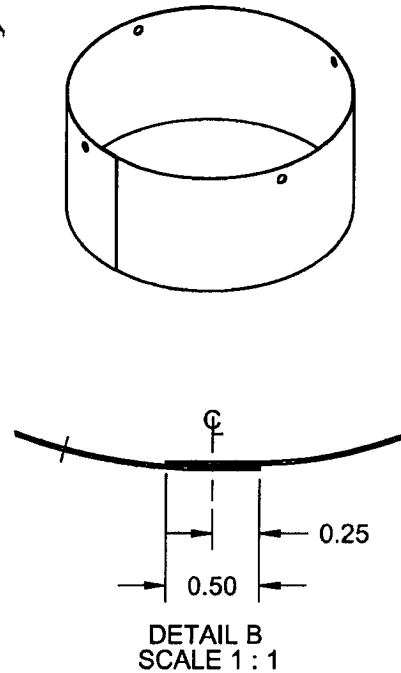
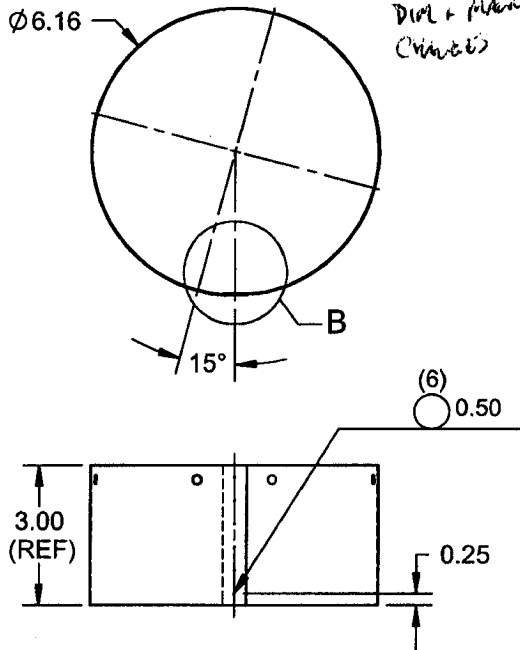
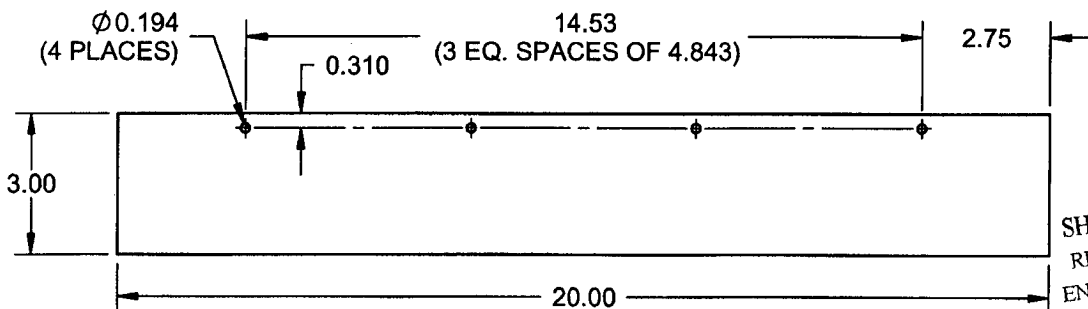
QTY -043	P/N	DESCRIPTION
X	D3476-043	BLOWER MOTOR ADAPTER WELDMENT
1	D3476-1	DUCT
1	D3476-3	DOME
2	D3476-7	TUBE
4	NAS1031C3W	NUTPLATE

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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3476</b>	REV. A SHEET 3 OF 7
DATE <b>06.01.27</b>		TITLE <b>BLOWER MOTOR ADAPTER</b>	SCALE 1:4

*# 06.04.03***UNDER REVIEW***02.04.03**Dim + Manufacturing  
Changes***D3476-1 DUCT****D3476-1F DUCT FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)  
(REF. DART SPEC. M304S26GA)
- 2) SPOT WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3476	REV. A SHEET 4 OF 7
DATE 06.01.27		TITLE BLOWER MOTOR ADAPTER	SCALE 1:2

RELEASED

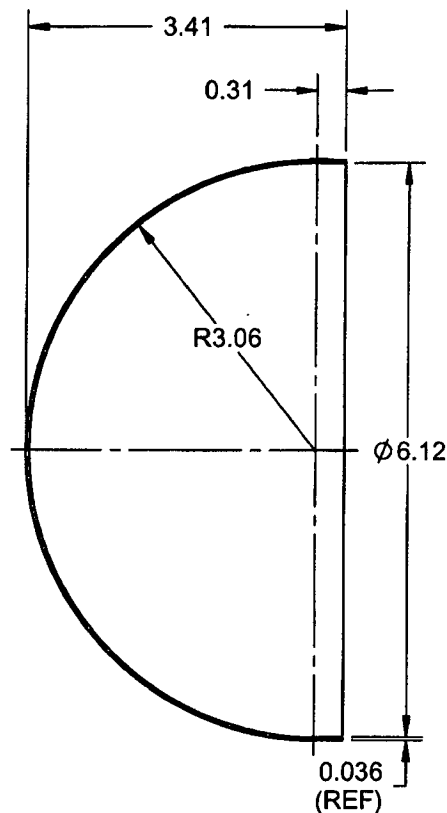
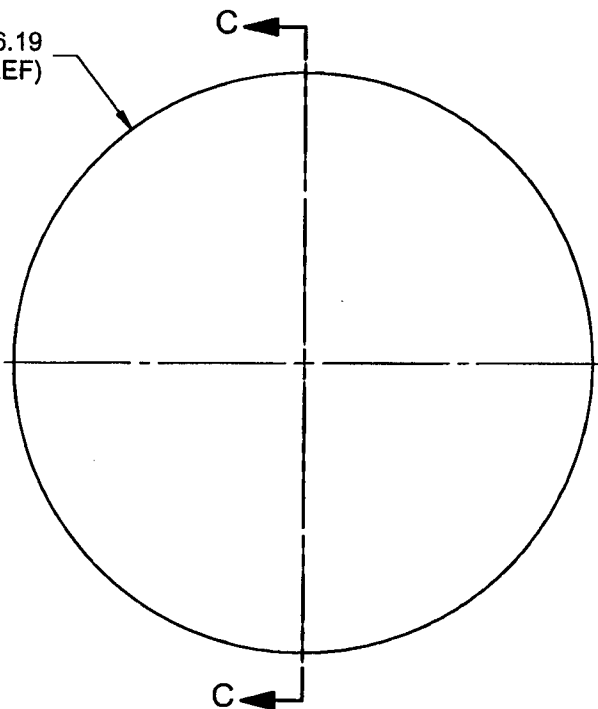
06.04.03 *#*

UNDER REVIEW

02.04.03 *#*

Dim + MANUFACTURING  
CHECKS

Ø6.19  
(REF)



**SECTION C-C**

**D3476-3S DOME, SPINNING DETAIL**

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.036 THICK PER MIL-S-5019 (ANNEALED) 2B FINISH (REF. DART SPEC. M304S20GA)
- 2) FORM BY SPINNING TO DIMENSION WITHOUT EXCESS THINNING OF MATERIAL (MINIMUM THICKNESS = 0.025").
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

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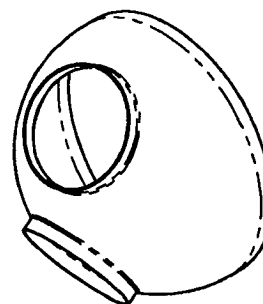
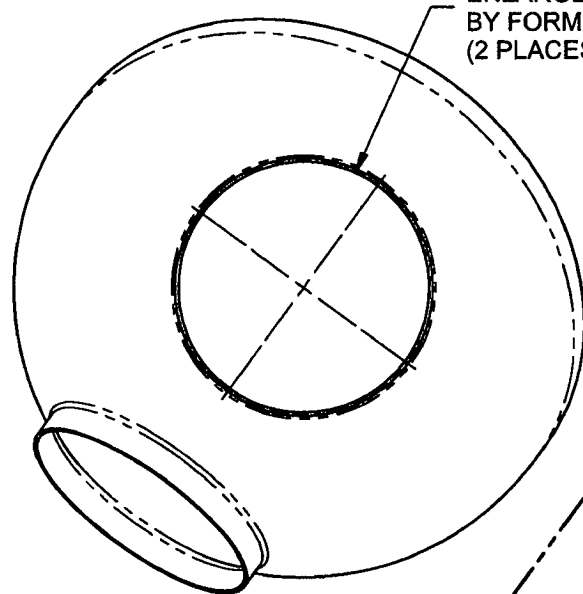


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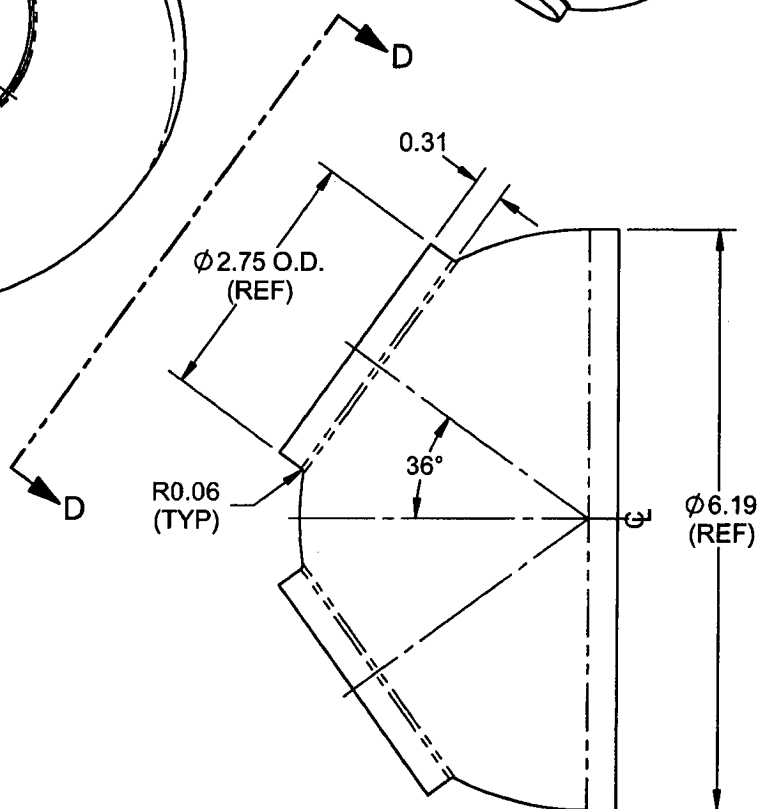
DESIGN #	DRAWN BY #	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. <b>D3476</b>	REV. A SHEET 5 OF 7
DATE <b>06.01.27</b>		TITLE <b>BLOWER MOTOR ADAPTER</b>	SCALE 1:2

# 06.04.03

CUT  $\varnothing 2.25$  HOLE,  
ENLARGE TO  $\varnothing 2.68$   
BY FORMING FLANGE  
(2 PLACES)

**VIEW D-D****UNDER REVIEW**

06.04.03

Dirt + Manufacturing  
Changes**D3476-3 DOME****NOTES:**

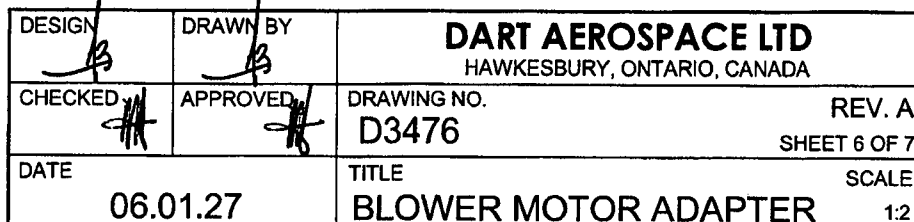
- 1) MATERIAL: MAKE FROM D3476-3S
- 2) FINISH: NONE
- 3) PART IS SYMMETRICAL ABOUT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

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# 06.04.03

02.04.03

Dim + Manufacturing  
Notes

0.06  
(REF)

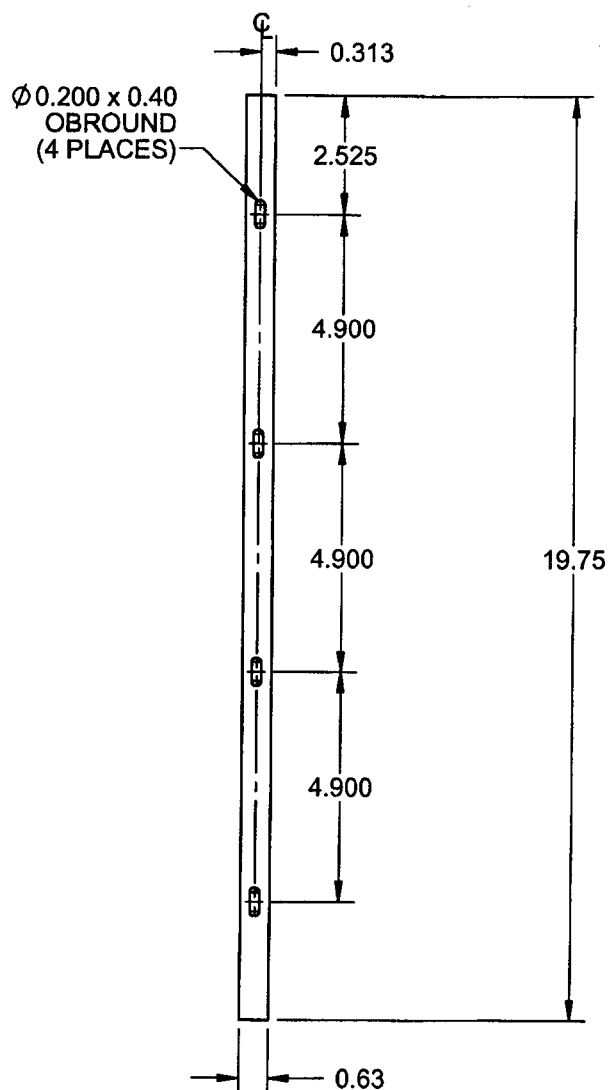
0.03

45°

Ø 6.25

Q OF  
OPENING

### **D3476-5 SPACER-RING**



**D3476-5F SPACER-RING**  
**FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.063 THICK, PER MIL-S-5019 (ANNEALED)  
2B FINISH (REF. DART SPEC. M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

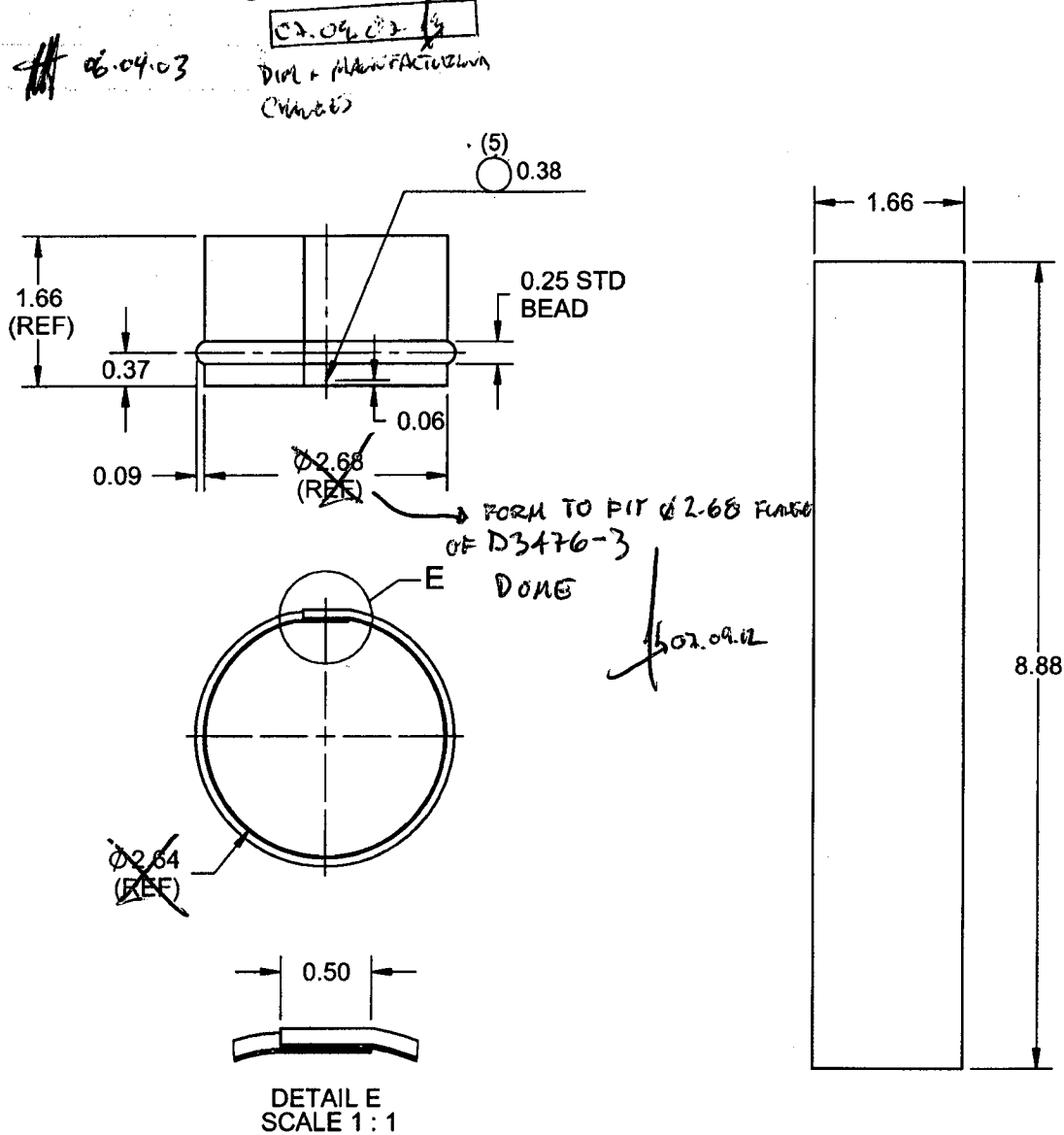
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CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3476	REV. A SHEET 7 OF 7
DATE 06.01.27		TITLE BLOWER MOTOR ADAPTER	SCALE 1:2

**UNDER REVIEW****D3476-7 TUBE****D3476-7 TUBE  
FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)  
(REF. DART SPEC. M304S26GA)
- 2) SPOT WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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**SPOT WELD TEST RECORD**  
**AMS-W-6858A**  
**CLASS 'C'**

**TEST NO#:** 35

**EMPLOYEE:** Melanie Taylor

**PART NUMBER:** D3476-7

**JOB NUMBER:** 34483

**MATERIAL TYPE:** 304

**MATERIAL THICKNESS:** .018

**GROUP SPECIFICATION**



**Group 1: Aluminum & magnesium**



**Group 2: Iron; nickel; cobalt**



**Group 3: Titanium**, <sup>SS</sup>

**TEST RESULTS**

	<b>PASS</b>	<b>FAIL</b>
<b>VISUAL:</b>	[ <input checked="" type="checkbox"/> ]	[ <input type="checkbox"/> ]
<b>PENETRATION:</b>	[ <input checked="" type="checkbox"/> ]	[ <input type="checkbox"/> ]
<b>PULL STRENGTH:</b>	[ <input checked="" type="checkbox"/> ]	[ <input type="checkbox"/> ]

**PSI Reading:** \_\_\_\_\_

**Qualified in accordance with standard AMS-W-6858A and QSI 004 (ref: 4.3)**

**DATE OF TEST COUPON:** 07/10/30

**QUALIFIER:** SB